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|---|-------------|----------------------|-----------------------|------------------|--|
| 10/017,630 | 12/14/2001 | William R. Matz | BS 01378 | 9447 | |
| 38516 7590 690022008 SCOTT P. ZIMMERMAN, PLLC PO BOX 3822 | | | EXAMINER | | |
| | | | OUELLETTE, JONATHAN P | | |
| CARY, NC 27 | 519 | | ART UNIT | PAPER NUMBER | |
| | | | 3629 | | |
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| | | | 09/02/2008 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/017,630 MATZ ET AL. Office Action Summary F.....

| | | Examiner | Artonit | | | |
|--|--|---|---|--------------|--|--|
| | | Jonathan Ouellette | 3629 | | | |
| | The MAILING DATE of this communication app | ears on the cover sheet with the o | orrespondence ad | dress | | |
| Period fo | or Reply | | | | | |
| WHIC - Exte after - If NC - Failu Any | ORTENED STATUTORY PERIOD FOR REPLY Chelver Is LONGER, FROM THE MAILING D/ naisons of time may be available under the provisions of 37 GR 1.1 SIX (6) NCNTHS from the mailing date of the communication. ACM CONTROL of the mailing date of the communication are used to the communication and the communication and the communication and the communication are used to the communication and the communica | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this of D (35 U.S.C. § 133). | • | | |
| Status | oo passi tom aspessional sociol on the notion | | | | | |
| 1)[7] | Responsive to communication(s) filed on 21 M | av 2008 | | | | |
| | This action is FINAL . 2b) ☐ This action is non-final. | | | | | |
| , | · - | | secution as to the | o morite ie | | |
| ا ال | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the mer closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| | ologica in accordance with the practice under E | x parte gadyle, 1000 C.B. 11, 40 | 70 O.G. 210. | | | |
| Disposit | ion of Claims | | | | | |
| 4)⊠ | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| | Claim(s) is/are allowed. | | | | | |
| | Claim(s) 21-53 is/are rejected. | | | | | |
| 7) | Claim(s) is/are objected to. | | | | | |
| 8)□ | Claim(s) are subject to restriction and/o | r election requirement. | | | | |
| Applicat | ion Papers | | | | | |
| 9) | The specification is objected to by the Examine | r. | | | | |
| | The drawing(s) filed on is/are: a) acc | | Examiner. | | | |
| | Applicant may not request that any objection to the | | | | | |
| | Replacement drawing sheet(s) including the correct | ion is required if the drawing(s) is ob | jected to. See 37 C | FR 1.121(d). | | |
| 11) | The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form P | TO-152. | | |
| Priority (| under 35 U.S.C. § 119 | | | | | |
| 12) | Acknowledgment is made of a claim for foreign | priority under 35 U.S.C. § 119(a) |)-(d) or (f). | | | |
| | ☐ All b)☐ Some * c)☐ None of: | . , | | | | |
| <i>'</i> | 1. Certified copies of the priority documents have been received. | | | | | |
| | Certified copies of the priority documents have been received in Application No | | | | | |
| | 3. Copies of the certified copies of the prior | | | Stage | | |
| | application from the International Bureau | и (РСТ Rule 17.2(a)). | | _ | | |
| * 5 | See the attached detailed Office action for a list | of the certified copies not receive | ed. | | | |
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| Attachmen | . , | A) 🗆 I-4 | (DTO 440) | | | |
| | ce of References Cited (PTO-892) | Interview Summary Paper No(s)/Mail D: | | | | |

| Attachment(s) | | |
|---|--|--|
| 1) Notice of References Cited (PTO-892) | 4) Interview Summary (PTO-413) | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date | |
| 3) T Information Disclosure Statement(s) (PTO/SE/08) | 5) Notice of Informal Patent Application | |
| Paper No(s)/Mail Date | 6) Other: | |

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DETAILED ACTION

Response to Amendment

1. Claims 21-53 remain pending in application 10/017,630.

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 21-25, 27-30, 32-36, 38-44, 48, and 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 6,463,585 B1).
- 4. As per independent Claim 21, Hendricks discloses a processor-implemented method for predicting content, comprising: determining a point in time of interest (Abstract, during program breaks); receiving content information from a content database, the content information describing a content offering at the point in time of interest (C13 L45-49, local programming database inherent to programming storage and transmission); receiving subscriber actions for the point in time of interest, the subscriber actions comprising buttons pushed by a subscriber at a remote control (Fig.3, Remote/Customer Interface, Upstream Interactivity; C10 L38-60, subscriber interface, remote control remote control inherently operated by pushing buttons) while viewing content (C11 L35-65); generating metrics describing the subscriber actions over a period of time (Fig.36, C20, C47, Viewer Log

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Information); and predicting, <u>based on the metrics</u>, <u>data</u> that will describe future subscriber actions (C11 L35-65, develop program lineup and integrated targeted advertising based on predicted/analyzed customer program watching habits – equivalent to future subscriber actions, as the user has to enter a button to determine the programs they watch).

- Hendricks fails to expressly disclose predicting future subscriber actions at a future point in time.
- 6. However, the purpose of instant invention is to analyze/compare media content with user actions (buttons pushed / clickstream data) to determine how a user reacts to media content provided (advertising / programming). The purpose of analyzing these user reactions is to provide users with content that they will watch / interact with. In other words, "predicting future buttons pushed by the user" is equivalent to matching content data with users that will keep them watching and stop them from changing the channel (pushing buttons).
- 7. Furthermore, Hendricks discloses developing program lineup and integrated targeted advertising based on predicted/analyzed customer program watching habits (C11 L35-65), in other words the Hendricks system is predicting (developed programs) what viewers will tune-in/watch/select (programming and advertising) instead of changing the channel or lowering the volume.
- 8. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included predicting future subscriber actions at a future point in time in the system disclosed by Hendricks (See KSR [127 S Ct. at 1739] "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").

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- As per Claim 22, Hendricks discloses merging content information received from the content database and the information related to buttons pushed by the subscriber to create subscriber choice information.
- 10. As per Claim 23, Hendricks discloses wherein generating the metrics comprises generating an event timeline that describes the subscriber actions over the period of time (Fig. 36, C20, C47, Viewer Log Information).
- 11. As per Claim 24, Hendricks discloses categorizing the merged content information and the subscriber actions for the point in time of interest.
- 12. As per Claim 25, Hendricks discloses wherein predicting the <u>data</u> comprises: predicting depression of a volume button on the remote control, predicting depression of a channel "up" button on the remote control, and predicting depression of a channel "down" button on the remote control (see rejection of independent claims).
- As per Claim 26, Hendricks discloses wherein predicting the <u>data</u> comprise predicting depression of a numeric button on the remote control.
- 14. As per Claim 38, Hendricks discloses creating tailored media content that corresponds to the predicted future channel changes.
- 15. As per Claim 39, Hendricks discloses wherein the tailored media content comprises content bundled with an advertisement for a product or service.
- As per Claim 40, Hendricks discloses distributing the tailored media content to the subscriber.
- 17. As per Claim 41, Hendricks discloses tracking popularity of the tailored media content for a period of time.

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- 18. As per Claim 42, Hendricks discloses creating tailored media content that corresponds to past subscriber actions.
- As per Claim 43, Hendricks discloses creating tailored media content that corresponds to a demographic of the subscriber.
- As per Claim 44, Hendricks discloses creating tailored media content that corresponds to a purchasing history of the subscriber.
- 21. As per Claim 48, Hendricks discloses providing the subscriber a log of received content.
- As per Claim 50, Hendricks discloses wherein the content information comprises an amount
 of time that an advertisement was received.
- 23. As per Claim 51, Hendricks discloses analyzing the subscriber actions to determine when the subscriber initially receives an entire advertisement but subsequently only receives portion of the advertisement.
- 24. As per independent Claim 27, Hendricks discloses a server for predicting subscriber actions, the server operative to: receive a point in time of interest (Abstract, during program breaks); receive content information from a content database, the content information describing a content offering at the point in time of interest (C13 L45-49, local programming); receive subscriber actions from a subscriber-action database, the subscriber actions comprising information related to buttons pushed by a subscriber at a remote control (Fig.3, Remote/Customer Interface, Upstream Interactivity; C10 L38-60, subscriber interface, remote control) while viewing the content offering at the point in time of interest (C11 L35-65); generate metrics describing the subscriber actions over a period of time (Fig.36, C20, C47, Viewer Log Information); and predict, based on the metrics, data

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describing future subscriber actions (C11 L35-65, develop program lineup and integrated targeted advertising based on predicted/analyzed customer program watching habits – equivalent to future subscriber clickstream, as the user has to enter a button to determine the programs they watch).

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- 25. Hendricks fails to expressly disclose predicting future subscriber actions at a future point in time.
- 26. However, the purpose of instant invention is to analyze/compare media content with user actions (buttons pushed / clickstream data) to determine how a user reacts to media content provided (advertising / programming). The purpose of analyzing these user reactions is to provide users with content that they will watch / interact with. In other words, "predicting future buttons pushed by the user" is equivalent to matching content data with users that will keep them watching and stop them from changing the channel (pushing buttons).
- 27. Furthermore, Hendricks discloses developing program lineup and integrated targeted advertising based on predicted/analyzed customer program watching habits (C11 L35-65), in other words the Hendricks system is predicting (developed programs) what viewers will tune-in/watch/select (programming and advertising) instead of changing the channel or lowering the volume.
- 28. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included predicting future subscriber actions at a future point in time in the system disclosed by Hendricks (See KSR [127 S Ct. at 1739] "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").

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29. As per Claim 28, Hendricks discloses wherein the server is operative to generate an event timeline that describes the subscriber actions over the period of time (Fig. 36, C20, C47, Viewer Log Information).

- 30. As per Claim 29, Hendricks discloses wherein the server is operative to predict <u>at least one of</u> depression of a channel button at the remote control <u>and depression of a volume button at the</u> remote control (buttons pushed, see rejection of independent claim).
- 31. As per Claim 30, Hendricks discloses wherein the server is operative to predict depression of a mute button at the remote control (see rejection of independent claim).
- 32. As per Claim 31, Hendricks discloses wherein the server is operative to predict depression of a "last" channel button at the remote control (see rejection of independent claim).
- 33. As per independent Claim 32, Hendricks discloses a computer readable medium storing processor executable instructions for performing a method, the method comprising: analyzing content information from a content database, the content information describing a content offering at a point in time of interest (C13 L45-49, local programming; Abstract, during program breaks); analyzing subscriber actions from a subscriber-action database, the subscriber actions comprising buttons pushed by a subscriber at a remote control (Fig.3, Remote/Customer Interface, Upstream Interactivity; C10 L38-60, subscriber interface, remote control) while accessing a content offering at the point in time of interest (C11 L35-65); generating metrics describing the subscriber actions over a period of time (Fig.36, C20, C47, Viewer Log Information); and predicting, based on the metrics, subscriber actions (C11 L35-65, develop program lineup and integrated targeted advertising based on

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 $predicted/analyzed\ customer\ program\ watching\ habits-equivalent\ to\ future\ subscriber$

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clickstream, as the user has to enter a button to determine the programs they watch).

- 34. Hendricks fails to expressly disclose predicting channel changes on the remote control.
- 35. However, the purpose of instant invention is to analyze/compare media content with user actions (buttons pushed / clickstream data) to determine how a user reacts to media content provided (advertising / programming). The purpose of analyzing these user reactions is to provide users with content that they will watch / interact with. In other words, "predicting future buttons pushed by the user" is equivalent to matching content data with users that will keep them watching and stop them from changing the channel (pushing buttons).
- 36. Furthermore, Hendricks discloses developing program lineup and integrated targeted advertising based on predicted/analyzed customer program watching habits (C11 L35-65), in other words the Hendricks system is predicting (developed programs) what viewers will tune-in/watch/select (programming and advertising) instead of changing the channel or lowering the volume.
- 37. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included predicting channel changes (or any buttons pushed) on the remote control that will describe future subscriber actions at a future point in time in the system disclosed by Hendricks (See KSR [127 S Ct. at 1739] "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").

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38. As per Claim 33, Hendricks discloses wherein generating the metrics comprises generating an event timeline that describes the subscriber actions over the period of time (Fig.36, C20, C47, Viewer Log Information).

- 39. As per Claim 34, Hendricks discloses instructions for correlating the content information with the subscriber actions.
- 40. As per Claim 35, Hendricks discloses instructions for categorizing the content information.
- 41. As per Claim 36, Hendricks discloses instructions for at least one of i) analyzing actions taken during proceeding content and ii) analyzing buttons pushed during succeeding content.
- 42. As per new Claim 52, Hendricks discloses instructions for accessing the subscriber actions taken by the subscriber while accessing and viewing content.

43. As per new independent Claim 53, Hendricks discloses a device, comprising: means for

analyzing content information from a content database, the content information describing a content offering at a point in time of interest (C13 L45-49, local programming; Abstract, during program breaks); means for analyzing subscriber actions from a subscriber-action database, the subscriber actions comprising buttons pushed by a subscriber at a remote control while accessing a content offering at the point in time of interest (Fig. 3, Remote/Customer Interface, Upstream Interactivity; C10 L38-60, subscriber interface, remote control; C11 L35-65); means for generating metrics describing the subscriber actions over a period of time (Fig. 36, C20, C47, Viewer Log Information); and means for predicting subscriber actions based on the metrics (C11 L35-65, develop program lineup and integrated targeted advertising based on predicted/analyzed customer program watching habits —

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equivalent to future subscriber clickstream, as the user has to enter a button to determine the programs they watch).

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- 44. Hendricks fails to expressly disclose predicting channel changes on the remote control.
- 45. However, the purpose of instant invention is to analyze/compare media content with user actions (buttons pushed / clickstream data) to determine how a user reacts to media content provided (advertising / programming). The purpose of analyzing these user reactions is to provide users with content that they will watch / interact with. In other words, "predicting future buttons pushed by the user" is equivalent to matching content data with users that will keep them watching and stop them from changing the channel (pushing buttons).
- 46. Furthermore, Hendricks discloses developing program lineup and integrated targeted advertising based on predicted/analyzed customer program watching habits (C11 L35-65), in other words the Hendricks system is predicting (developed programs) what viewers will tune-in/watch/select (programming and advertising) instead of changing the channel or lowering the volume.
- 47. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included predicting channel changes (or any buttons pushed) on the remote control that will describe future subscriber actions at a future point in time in the system disclosed by Hendricks (See KSR [127 S Ct. at 1739] "The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.").
- Claims 37, 45-47, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Ludtke et al. (US 6,202,210).

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49. As per Claims 37 and 45, Hendricks fails to expressly disclose wherein the processor receives buttons pushed by the subscriber to receive an alternate source of content.

- Ludtke teaches monitoring viewer histories to include programming from additional AV sources/DVD player for marketing purposes (Fig. 5, C7 L25-39).
- 51. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included wherein the processor receives actions taken by the subscriber to receive an alternate source of content, as disclosed by Ludtke in the system disclosed by Hendricks, for the advantage of providing a method/system for predicting content, with the ability to increase system effectiveness by analyzing customer viewing histories on all available programming sources.
- 52. As per Claim 46, Hendricks and Ludtke disclose presenting types of content available to the subscriber during a period of time, with the types of content comprising an alternate video source.
- 53. As per Claim 47, Hendricks and Ludtke disclose wherein the step of presenting the types of content available to the subscriber during the period of time comprises integrating content available from the alternate video source into an electronic programming guide.
- 54. As per Claim 49, Hendricks and Ludtke disclose merging the content received from the content database and information related to an alternate video source to determine what content is received by the subscriber.

Response to Arguments

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55. Applicant's arguments filed 5/21/2008, with respect to Claims 21-53, have been considered but are not persuasive. The rejection will remain as FINAL, based on the sited prior art.

56. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS

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of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will

expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of

this final action.

57. Regarding the Applicant's arguments, the Applicant is directed to the clarified rejection

above.

Conclusion

58. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Ouellette whose telephone number is (571) 272-6807. The examiner can normally be reached on Monday through Thursday, 8am - 5:00pm.

59. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-6812. The fax phone numbers for the organization where this application or proceeding is assigned (571) 273-8300 for all official communications.

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60. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Office of Initial Patent Examination whose telephone number is (703) 308-1202.

September 3, 2008

/Jonathan Ouellette/

Primary Examiner, Art Unit 3629